



#4 2152
01/24/03

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Attorney Docket No.: 45795.23.1

MASTERS

Application No.: 09/922,418

Examiner: *Unknown.*

Filed: August 3, 2001

Group Art Unit: 2152

For: DEVICES INCLUDING PROTEIN MATRIX MATERIALS AND METHODS OF
MAKING AND USING THEREOF

INFORMATION DISCLOSURE STATEMENT

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Assistant Commissioner for Patents
Washington, D.C. 20231

AUG 13 2002

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Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

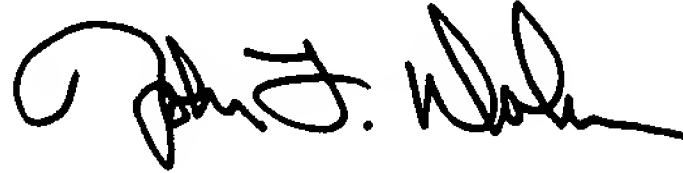
This information is being filed before the mailing date of a first Office Action on the merits. No certification or fee is required.

Copies of the references cited on pages 1-4 of the enclosed PTO-1449 form were cited by or submitted to the Office in Patent Application No. 09/160,421, filed September 25, 1998, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these references are not attached. 37 C.F.R. § 1.98(d).

By submitting these references, Applicant does not admit that the references are prior art to or material to this application, and reserves the right to establish that any reference is

not prior art. Applicant does not represent that the references have been reviewed in detail; there may be details in the references of which Applicant is unaware.

Respectfully submitted,



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CERTIFICATE OF MAILING

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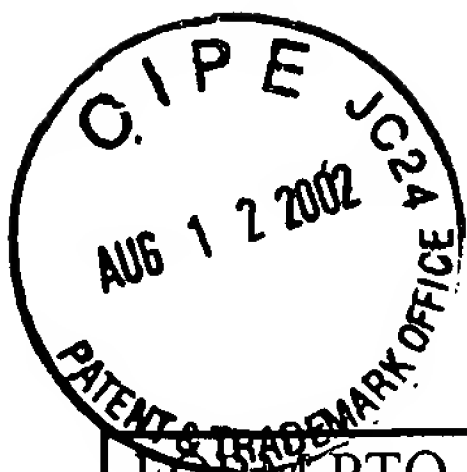
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Joleen R. Lauer



FORM PTO-1449 MODIFIED				Docket No.: 45795.23.1		Application No.: 09/922,418	
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				APPLICANT: MASTERS			
				FILING DATE: August 3, 2001			
				GROUP ART UNIT: 2152			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,773,019	6/1998	Ashton, et al.	424	423		
	5,665,428	9/1997	Cha, et al.	427	213.3		
	5,573,934	11/1996	Hubbell, et al.	435	177		
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	5,041,292	8/1991	Feijen	424	484		
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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)							
	Masters, et al., <i>Liposphere Local Anesthetic Timed-Release for Perineural Site Application</i> , Pharmaceutical Research, Vol. 15, No.7, 1998, pp. 1038-1045						
	Ghandehari, et al., <i>Genetic Engineering of Protein-Based Polymers: Potential in Controlled Drug Delivery</i> , Pharmaceutical Research, Vol. 15, No. 6, 1998, pp. 813-815						
	Masters, Letter to Joseph Cappello, July 1, 1996						
	Skarda, et al., <i>Biodegradable Hydrogel for Controlled Release of Biologically Active Macromolecules</i> , Journal of Bioactive and Compatible Polymers, Vol. 8, January 1993, pp. 24-40						
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

	Heller, et al., <i>Controlled release of water-soluble macromolecules from Bioerodible Hydrogels</i> , Biomaterials 1983, Vol. 4 October, pp. 262-266
	Dickinson, et al., <i>Biodegradation of a poly(α-amino acid) hydrogel. I. In vivo</i> , Journal of Biomedical Materials Research, Vol. 15, 577-589 (1981)
	Chvapil, et al., <i>Some Chemical and Biological Characteristics of a New Collagen-Polymer* Compound Material</i> , J. Biomed. Mater. Res. Vol. 3, pp. 315-331 (1969)
	Fernandes, et al., <i>Regulation of Polymeric Implants for Site-specific Drug Delivery</i> , Polymeric Site-specific Pharmacotherapy, Chapter 16, pp. 424-441

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	4,849,141	7/1989	Fujioka, et al.	264		
	4,347,234	8/1982	Wahlig, et al.	424	426	

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✓	Choi, et al. Implantation Biology: The Host Response and Biomedical Devices. <i>The Effect of Biomaterials on the Host</i> , CRC Press, Boca Raton 405 pages, 1994. Chapter 3, pp. 39-53
✓	ABSTRACTS, <i>Eighth International Symposium on Recent Advances in Drug Delivery Systems</i> , February 24, 1997, Salt Lake City, UT, pp. 36-39, 138-140
✓	AAPS: Annual Meeting & Exposition, <i>Symposia Abstracts & Biographies</i> , Boston, MA, November 2, 1997, pp. 25-27
✓	Masters, Course Syllabus for Mayo Graduate Course, <i>Polymeric Site-Specific Drug Delivery</i> , April 1998

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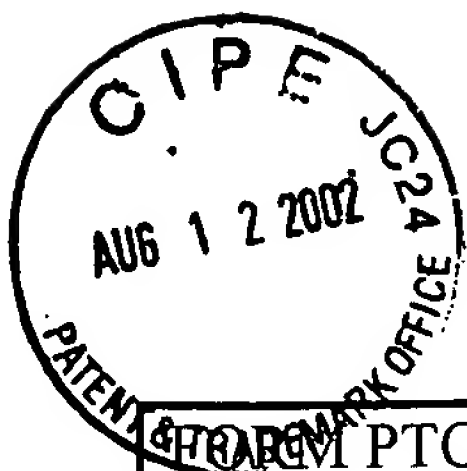
\	Pramik, <i>Drug Delivery Firms Focus on Controlled Release Techniques</i> , Genetic Engineering News, October 1, 1996, pp. 1, 38, 40
'	Morrow, <i>Companies to Take Broad Range of Approaches to Develop Rheumatoid Arthritis Therapies</i> , Genetic Engineering News, January 15, 1997, pp. 1, 7, 9, 24
\	Kelly, <i>Researchers Advancing Biopolymer Systems as Vehicles for Delivering Drugs</i> , Genetic Engineering News, May 15, 1997, pp. 1, 25, 32, 35, 36, 41
'	Lewis, <i>New Directions in Research on Blood Substitutes</i> , Genetic Engineering News, June 15, 1997, pp. 1, 10, 12, 20, 26, 33, 35, 36, 41

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	Sedlak, <i>Signal Transduction Companies Moving Some Products to the Clinical Testing Environment</i> , Genetic Engineering News, March 15, 1997, Vol. 17, No. 6, pp. 1, 27, 36
	<i>Tissue Engineering</i> , Genetic Engineering News, January, 1998, pp. 33
	Pramik, <i>Positive Clinical Results in Pulmonary Drug Delivery: Inhaled Insulin Effective as Injected Drug</i> , Genetic Engineering News, July, 1998, Vol. 18, No. 13, pp. 1, 12, 35, 46
	Dutton, <i>Tissue Engineering: Continued Growth Expected as New Techniques Evolve</i> , Genetic Engineering News, April, 1998, pp. 12, 37

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✓	Masters, <i>Drug Delivery to Peripheral Nerves</i> , Polymeric Site-Specific Pharmacotherapy, 1994, pp. 443-455.
✓	Langer, <i>1994 Whitaker Lecture: Polymers for Drug Delivery and Tissue Engineering</i> , Annals of Biomedical Engineering, 1995, Vol. 23, pp. 101-111.
✓	<i>The Biological Production of Protein Polymers and Their Use</i> , Trends in Biotechnology, November 1990, Vol. 8, No. 11.
✓	Ratner, et al., <i>An Introduction to Materials in Medicine</i> , Biomaterials Science, 1996.

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	Cappello, et al., <i>Genetic Engineering of Structural Protein Polymers</i> , Biotechnology Progress, 1990, pp. 198-202.						
	Anderson, <i>Characterization of Silk-like Proteins and Processing for Biomedical Applications</i> , Protein-Based Materials, 1997, pp. 371-433.						
	Abbott, et al., <i>Vascular Grafts: Characteristics and Routine Selection of Prostheses</i> , Vascular Surgery, a Comprehensive Review, 5 th Edition						
	Caruana, <i>New Drugs Spur Novel Delivery Systems</i> , Chemical Engineering Progress, July 1997, pp. 15-19.						
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